



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/539,240

12/14/2005

Yuji Hiramatsu

90606.52/ta

9234

54071

7590

09/03/2008

YAMAHA HATSUDOKI KABUSHIKI KAISHA

C/O KEATING & BENNETT, LLP

1800 Alexander Bell Drive

SUITE 200

Reston, VA 20191

EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT

PAPER NUMBER

3618

NOTIFICATION DATE

DELIVERY MODE

09/03/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM

uspto@kbiplaw.com

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/539,240 | Applicant(s) HIRAMATSU, YUJI | |
| | Examiner Frank B. Vanaman | Art Unit 3618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-11, 15-22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11, 15-17, 19-22 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of Application

1. Applicant's amendment, filed May 14, 2008, has been entered in the application. Claims 7-11, 15-22 and 24-26 are pending, with claims 1-6, 12-14 and 23 being canceled.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 7-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (US 5,487,441, cited previously) in view of Hsu et al. (US 5,330,026, cited previously). Endo et al. teach a skateboard including a board portion (1) with a top and bottom surface, and which is made from a material which constitutes a structure and which has an inherent flexibility property, wheels (8, 11) provided on a bottom surface at front and rear regions thereof, a motor controller in the form of at least a battery (13), which is provided with at least one fixing element in the form of a bolt (14) and nut (15), which is located only at a longitudinally central location on the controller, leaving the front and rear portions free (see figure 9, for example) fixing the top face to the bottom of the board, and with the remaining portions being suspended from the board as broadly claimed, the arrangement further provided with a weight transfer detection sensor (16, 17), which detects a weight transfer of the rider (e.g., on or off 16, 17) and generates a signal by placing a motor resistance across the battery (i.e., by providing a current draw), and controlling the motor.

The reference to Endo fails to explicitly separately teach a case for the controller which comprises a battery (13). It is very old and well known to provide controllers and/or batteries in casings so as to protect them from damage, and it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a case to accommodate the battery for the very well known purpose of preventing damage to the battery. Endo et al. fail to explicitly teach that the casing has side edge surfaces, a top plate, and a bottom plate, where the top plate is in contact with the board bottom, and at least one fixing element is provided inwardly from a side edge surface. Hsu et al. teach that it is well known to provide a battery and controller in a casing (2, 21) having a top

Art Unit: 3618

plate (2) with side edge surfaces (extending downwardly from the periphery of top plate 2, and outer periphery of 21), a bottom plate (bottom of 21) spaced from the top plate, the top plate having at least one fixing aperture (25) located inwardly from the side edge portions (at least the periphery of 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the battery and/or controller as taught by Endo et al. in a casing having top, bottom and side portions as taught by Hsu et al. for the well known purpose of protecting the components internal of the casing.

As regards claim 11, the reference to Endo et al. fails to explicitly teach plural batteries, however it is very old and well known to duplicate already-taught elements in the prior art to enhance or multiply the taught effect of the elements, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the battery as plural batteries for the purpose of (1) providing a higher motor drive voltage and/or (2) providing a higher motor current.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo (cited above) in view of Hsu et al. and Staelin et al. (US 6,059,062). The reference to Endo et al. as modified by Hsu et al. is discussed above and fails to teach that at least one of the battery and controller are spaced from the bottom of the board. Staelin et al. teach that it is well known in motorized propulsion devices to provide at least a battery (33) mounted with respect to the bottom face of a foot accommodating portion (18) so as to be spaced from the bottom face (e.g., figure 1a). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the battery taught by Endo et al. as modified by Hsu et al. to be mounted in a spaced relationship with the bottom of the board face, as suggested by Staelin et al., for the purpose of accommodating a further element (44, 76, 171, etc.) in the same footprint of the battery casing, so as to facilitate closely proximate mounting of the battery and other elements, facilitating, for example, shorter electric line lengths, reducing voltage drop.

5. Claims 17, 19, 20, 21, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (cited above) in view of Martin (US 5,020,621, cited

Art Unit: 3618

previously). Endo et al. teach a skateboard including a board portion (1) with a top and bottom surface, and which is made from a material which constitutes a structure and which has an inherent flexibility property, wheels (8, 11) provided on a bottom surface at front and rear regions thereof, a motor controller in the form of at least a battery (13), which is mounted so as to have a top face secured to the bottom of the board, and with the remaining portions being suspended from the board as broadly claimed, the arrangement further provided with a weight transfer detection sensor (16, 17), which detects a weight transfer of the rider (e.g., on or off 16, 17) and generates a signal by placing a motor resistance across the battery (i.e., by providing a current draw), and controlling the motor. The reference to Endo fails to explicitly separately teach a case for the controller which comprises a battery (13). It is very old and well known to provide controllers and/or batteries in casings so as to protect them from damage, and it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a case to accommodate the battery for the very well known purpose of preventing damage to the battery. The reference to Endo et al. fails to teach the battery and/or case arranged to be supported by a plurality of supports which support both longitudinal ends, further allowing relative longitudinal movement between the supports and the case. Martin teaches that it is well known for provide a casing which contains at least a battery (37) mounted to an underside of a board (11) with a mounting (40) having plural supports (see at forward-most and rearward-most extents of 40, figure 1) wherein the case is arranged to be allowed longitudinal movement (through the use of resilient padding 41) with respect to the supports, the bottom face of the casing constituting a guiding member which is capable of moving longitudinally with respect to the center portion of the mounting (40) which constitutes a guide rail, to the breadth claimed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the mounting for the casing of the board taught by Endo et al. in the manner taught by Martin, which allows longitudinal movement of the casing with respect to at least two supports, for the purpose of allowing the flexibility of Endo et al.'s board to be unimpeded by the presence of the battery and casing. One of ordinary skill, noting the clear advantage taught by Martin in providing a mounting which both allows the

Art Unit: 3618

natural flexibility of the board to be retained and reduces mechanical shock in the mounting would recognize that such a mounting would provide a similar analogous retention of board flexibility and shock absorption in Endo et al.

As regards claim 22, the reference to Endo et al. as modified fails to explicitly teach plural batteries, however it is very old and well known to duplicate already-taught elements in the prior art to enhance or multiply the taught effect of the elements, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the battery as plural batteries for the purpose of (1) providing a higher motor drive voltage and/or (2) providing a higher motor current.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. in view of Martin and Staelin et al. The reference to Endo et al. as modified by Martin is discussed above, and fails to teach that at least one of the battery and controller are spaced from the bottom of the board. Staelin et al. teach that it is well known in motorized propulsion devices to provide at least a battery (33) mounted with respect to the bottom face of a foot accommodating portion (18) so as to be spaced from the bottom face (e.g., figure 1a). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the battery taught by Endo et al. as modified by Martin to be mounted in a spaced relationship with the bottom of the board face, as suggested by Staelin et al., for the purpose of accommodating a further element (44, 76, 171, etc.) in the same footprint of the battery casing, so as to facilitate closely proximate mounting of the battery and other elements, facilitating, for example, shorter electric line lengths, reducing voltage drop.

Allowable Subject Matter

7. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Comments

8. Applicant's comments, filed with the amendment, have been carefully considered. Applicant's comments as regards an updating of the review of the materials previously submitted in applicant's Information Disclosure Statements are noted. The reasoning for this request is not clear, and applicant is explicitly invited to inform the examiner of any changes in the materials submitted which is material to the patentability of the application, or otherwise explain the reasoning behind such a request. Applicant's comments concerning the amendment to claim 7 and the reference to Endo et al. as previously applied by itself are noted, and the examiner notes that the Endo reference cannot anticipate or render obvious, by itself, amended claim 7. Note the reference to Hsu et al., now applied in direct response to applicant's amendment. Similarly, as regards amended claim 17, the examiner agrees that the combination of the Endo reference and Smolka cannot be maintained in view of applicant's amendment. Note the reference to Martin, cited previously and now applied in combination, again, in direct response to applicant's amendment.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3618

10. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618

/Frank B Vanaman/
Primary Examiner, Art Unit 3618